## Christianson

[54]	METHOD OF RECYCLING DOSIMETERS		
[75]	Inventor:	Charles L. Christianson, Rockville, Md.	
[73]	Assignee:	The United States of America as represented by the Secretary of the	

	Navy, Washington, D	.C.	
[21]	Appl. No.: 511,127		
[22]	Filed: Apr. 19, 1990		
[51] [52]	Int. Cl. <sup>5</sup>		
[58]	Field of Search 250/4	84.1 C, 484.1 R	
[56]	References Cited		
	U.S. PATENT DOCUME	NTS	

## 

..... 250/459.1

OTHER PUBLICATIONS James B. Schulman, William Shurcliff, Robert J. Ginther and Frank M. Attix, "Radiophotoluminescence Dosimetry System of the U.S. Navy." Nucleonics, vol. 11, No. 10 (Oct., 1953) pp. 52-56.

Primary Examiner—Constantine Hannaher Attorney, Agent, or Firm—Kenneth E. Walden; Jacob Shuster

## **ABSTRACT** [57]

Personnel dosimeters are salvaged after use or prolonged storage by dividing batches thereof into separate groups on the visually observable degradation of radiation sensing surfaces thereon. The groups are reconditioned by different treatments to respectively correct for surface degradation and the effects of prior radiation exposure. A small fraction of the dosimeters withdrawn from the group treated for removal of the effects of prior radiation exposure, undergo gamma irradiation and measurement of resulting emissions to calculate correction factor assigned to the reconditioned dosimeters to compensate for reduced sensitivity.

25 Claims, 3 Drawing Sheets

